

corresponding to the recognized word when the compared result is at least the reference value.

Independent claim 1 further recites modifying the reference voice model based on the characteristics of the voice data which succeeded in the voice recognition.

Ittycheriah, Netsch and Morgan do not teach or suggest all of the features of independent claim 1. The Office Action states that the combination of Ittycheriah and Netsch is silent as to the claimed features relating to command performance. The Office Action then cites Morgan's col. 2, lines 50-58 for the missing features.

Morgan discloses executing a command at step 97 (in FIG. 7). More specifically, Morgan's FIG. 7 discloses that after a command has been recognized (step 90), the command may be displayed (step 91) and a timer may start (step 92). Accordingly, Morgan does not teach "to perform the command corresponding to the recognized word when the compared result is at least the reference value." Morgan further then waits for an end of the timer (step 93) prior to carrying out the command (step 97). As another alternative, Morgan discloses that after the timer starts (step 92), a user may state another command (step 94) and if the user has spoken a confirmation of the selected command (step 96), then the selected command may then be carried out (step 97). See Morgan's col. 5, line 48-col. 6, line 8. Accordingly, Morgan discloses a command is executed after a timer expires or after a command is again spoken. This does not suggest "to perform the command corresponding to the recognized word when the compared result is at least the reference value" as recited in independent claim 1. Additionally, Morgan does not suggest to perform the command when the compared result is at least the reference value. The rejection should be withdrawn at least for this reason.

Further, Ittycheriah clearly describes separate processes such as the enroll process (FIG. 2), the update process (FIG. 3) and the update grammar process (FIG. 4). When discussing features relating the claimed “comparing the similarity of the retrieved word . . . similarity reference . . . report a voice recognition failure . . . report a voice recognition success . . . reference value” as recited in independent claim 1, the Office Action cites features from Ittycheriah’s FIG. 3 relating to the update process (as well as FIG. 6). The Office Action therefore appears to suggest that Morgan’s disclosure of executing a command would be a modification of Ittycheriah’s FIG. 3 update process. However, there is no suggestion for such a modification. Additionally, such a modification would be improper.

More specifically, Ittycheriah’s FIG. 3 is an update process to avoid confusingly similar words to be provided in a list. See col. 3, lines 45-48. In stark contrast, Morgan’s FIG. 7 relates to displaying a command and executing the displayed command. Morgan has no suggestion for updating a vocabulary list (such as of Ittycheriah) while performing the FIG. 7 operations of displaying commands. Ittycheriah’s FIG. 3 does not suggest any type of command execution. Further, there is no suggestion to modify Ittycheriah’s FIG. 3 update process so as to include “to report a voice recognition success and perform the command corresponding to the recognized word when the compared result is at least the reference value.” Rather, the only suggestion for these features are provided in applicant’s own specification. The Office Action reliance on applicant’s specification to provide this suggestion is impermissible hindsight. The rejection should be withdrawn at least for this reason.

Independent claim 1 recites “comparing the similarity of the retrieved word with the similarity reference value to report a voice recognition failure when the compared result is below the reference value, and to report a voice recognition success and perform the command corresponding to the recognized word when the compared result is at least the reference value.” The Office Action appears to cite Ittycheriah’s FIGs. 3 and 6 and col. 6, lines 40-67 for these features (other than those relating to performing a command). Applicant respectfully submits that Ittycheriah’s FIG. 6 and col. 6, lines 40-67 do not suggest “to report a voice recognition failure when the compared result is below the reference value, and to report a voice recognition success . . . when the compared result is at least the reference value.”

Additionally, Ittycheriah’s FIG. 3 also does not teach or suggest these claimed features. That is, Ittycheriah relates to a voice recognition system in which the disclosed arrangements attempt to prevent the entry of confusingly similar phrases in a vocabulary list. Thus, there would be no suggestion to including command performance within Ittycheriah’s update process and/or to report a voice recognition success and perform a command.

Even more specifically, in Ittycheriah’s block 36, the voice recognition system searches for the best phrase in the database. The system returns the best model or phrase. See col. 4, lines 12-21. At this point (which is based on a comparison), there is no suggestion to include features from Morgan so as to obtain the claimed “comparing the similarity of the retrieved word with the similarity reference value to report a voice recognition failure when the compared result is below the reference value, and to report a voice recognition success and perform the

command corresponding to the recognized word when the compared result is at least the reference value.”

Subsequently in Ittycheriah’s block 38, the voice recognition system attempts to determine whether the best model or phrase (from box 36) corresponds to the phrase the user seeks to enroll in the list. See col. 4, lines 20-23. If an alleged voice recognition success is determined such as the YES branch of block 38 (FIG. 3), then the user is instructed that a similar phrase exists on the list and the user is provided with instructions. See block 42. This does not teach or suggest “to report a voice recognition success and perform the command corresponding to the recognized word” as recited in independent claim 1. Rather, Ittycheriah’s alleged success actually is an indication that a similarly confusing phrase may be on the list. For example, upon a successful indication (box 38), the user is instructed that the phrase is too similar to another phrase on the list. Because the phrase to be enrolled is too similar (or confusing) to another phrase on the list, the phrase to be enrolled will be rejected from the enrollment process. See col. 4, lines 33-34. If a phrase is to be rejected, there is no motivation to report a voice recognition success and perform the command corresponding to the recognized word.

Even if Morgan were combined with Ittycheriah, there still would be no motivation at box 42 to perform a command corresponding to the recognized word (since the recognized word is too similar). This differs from the present application in which a voice recognition success allows a command to be executed (to carry out the recognized command). The determination of a confusingly similar phrase in Ittycheriah means that other events are

performed by the user so as to determine which phrase should be “on the list.” There is no suggestion that upon the determination of the confusingly similar phrase, that a command would then be executed based on the confusingly similar phrase.

Applicant respectfully submits that Ittycheriah’s FIG. 3 relates to an updating process and does not relate to a determination of a voice recognition success (or the reporting of one) and the performance of a command corresponding to the recognized word (even if FIG. 3 were modified to include features of Morgan).

Applicant also notes that Morgan’s alleged command performance can not be combined with box 40 of FIG. 3 in order to reach the features of claim 1. More specifically, independent claim 1 recites “modifying the reference voice model based on the characteristics of the voice data which succeeded in the voice recognition.” In contrast, Ittycheriah discloses that upon the NO branch of box 38, the phrase is maintained on the list 10. See col. 4, lines 25-26.

For at least the reasons set forth above, the applied references of Ittycheriah, Netsch and Morgan do not teach or suggest all the features of independent claim 1. Therefore, independent claim 1 defines patentable subject matter at least for these reasons.

Independent claim 3 recites performing an operation based on the received voice data and associated with the reference voice model upon success of the voice detection and updating the reference voice model using the voice data received from the user upon a judged success of the voice detection. Ittycheriah, Netsch and Morgan do not teach or suggest these features for at least similar reasons as set forth above. Similarly as stated above, Ittycheriah, Netsch and Morgan do not suggest these features (such as performing an operation) that occur upon a

[judged] success of the voice detection. Accordingly, independent claim 3 defines patentable subject matter at least for this reason.

Independent claim 7 recites determining if the voice data from the user corresponds to the reference voice model; executing a command associated with the reference voice model upon a positive correspondence of the reference voice model and the voice data from the user; and updating the reference voice model using the voice data from the user, upon the positive correspondence of the reference voice model and the voice data from the user. Ittycheriah, Netsch and Morgan do not teach or suggest these features for at least similar reasons as set forth above. Accordingly, independent claim 7 defines patentable subject matter at least for this reason.

Independent claim 24 recites comparing the characteristics of the detected user voice with characteristics of a previously obtained reference voice model to retrieve a word having the largest similarity; performing a command based on the received user voice and corresponding to the retrieved word when the compared result is at least a reference value; and modifying the reference voice model based on the characteristics of the user voice. Ittycheriah, Netsch and Morgan do not teach or suggest these features for at least similar reasons as set forth above. Accordingly, independent claim 24 defines patentable subject matter at least for this reason.

Each of the dependent claims depends from one of the independent claims and therefore defines patentable subject matter at least for this reason. In addition, the dependent claims recite features that further and independently distinguish over the applied references.

Serial No. 09/729,768
Reply to Office Action dated November 16, 2005

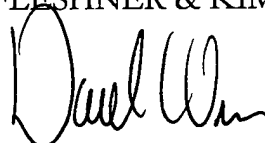
Docket No. HI-0029

CONCLUSION

In view of the foregoing, it is respectfully submitted that the application is in condition for allowance. Favorable consideration and prompt allowance of claims 1-5, 7-16 and 18-27 are earnestly solicited. If the Examiner believes that any additional changes would place the application in better condition for allowance, the Examiner is invited to contact the undersigned attorney at the telephone number listed below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this, concurrent and future replies, including extension of time fees, to Deposit Account 16-0607 and please credit any excess fees to such deposit account.

Respectfully submitted,
FLESHNER & KIM, LLP



David C. Oren
Registration No. 38,694

P.O. Box 221200
Chantilly, Virginia 20153-1200
(703) 766-3701 DCO/kah

Date: February 15, 2006

Please direct all correspondence to Customer Number 34610